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EXAMINER	
YANG, CLARA I	
ART UNIT	**PAPER NUMBER**
2635	9

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/903,882	Applicant(s) WACYK, IHOR	
	Examiner Clara Yang	Art Unit 2635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 March 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4 and 9-17* is/are rejected.

7)☒ Claim(s) *5-8* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see page 14, filed on 15 March 2004, with respect to claims 1 and 12 have been fully considered and are persuasive. The 35 U.S.C. § 112 rejection of claims 1 and 12 has been withdrawn.

2. Applicant's arguments filed on 15 March 2004 with respect to claims 9 - 11 have been considered but are moot in view of the new ground(s) of rejection.

3. Applicant's arguments filed on 15 March 2004 with respect to claims 1 - 4 and 12 - 17 have been fully considered but they are not persuasive.

On page 18, the applicant states "the Examiner asserts without citation to the reference that the method of Armstrong includes transmitting a Read Tag_ID command to transponders and determining from the received Tag_IDs whether there is a transponder that has the same Tag_ID as another transponder." However, the examiner cites that Armstrong teaches the first two steps (i.e., (a) host computer 100 or controller transmitting a Read Tag_ID command to transponders 150 and determining if there is a transponder 150 that has the same Tag_ID /address as another transponder 150; and (b) host computer 100 transmitting a Re-select_ID command or "randomize address" signal to a group of transponders 150 having the same Tag_ID) in Section [0062], lines 11 - 26.

On page 19, the applicant argues that Armstrong's system fails to transmit an address inquiry signal to the address of a first device and determine whether one or more additional responses are received from one or more other devices. First, the examiner asserts that controllers with the ability to transmit an address inquiry to a specific transponder are well known (see page 6, lines 7 - 13, of the previous Office Action mailed on 10 December 2003).

Because the applicant fails to traverse the examiner's assertion, the well known in the art statement is taken to be admitted prior art. Secondly, Armstrong's system is able to determine whether one or more additional responses are received from one or more other devices. In Section [0062], Armstrong discloses that a "random number-based Tag_ID is communicated to host computer 10 during a Read Tag_ID process, and thereafter permits host 100 to subsequently address only that specific transponder using the associated Tag_ID" (see lines 14 - 19). In other words, host computer 100 transmits a Read Tag_ID command (i.e., "address inquiry signal"), which is received by a transponder 150 and causes transponder 150 to generate a random Tag_ID and then transmit the Tag_ID to host computer 100 (see Section [0052] for more details on the Read Tag_ID process). Armstrong adds, "If...an article arrives having a transponder 150 possessing the same Tag_ID as another transponder 150...host computer 100 can cause groups or individual transponders 150 to select a new Tag_ID" (see lines 19 - 24). Thus Armstrong does teach host computer 100 determining whether one or more additional responses are received from one or more transponders 150 as recited in claim 1.

In response to the applicant's argument on page 20 that U.S. Patent No. 6,133,832 (Winder et al.) and U.S. Patent Application Publication No. U.S. 2002/0084890 A1 (Guerrieri et al.) fail to suggest all the limitations of claims 1 and 12, Armstrong does teach, as previously explained, the steps of (f) determining whether one or more additional responses to address inquiry are received and (g) instructing all device having the same address to generate a random address. Consequently, Kowalski, as modified by Armstrong, teaches all the limitations of claims 1 and 12 as mentioned above, and the examiner maintains the 35 U.S.C. § 103 rejection of independent claims 1 and 12 and dependent claims 2 - 4 and 13 - 17.

Drawings

4. The drawings were received on 15 March 2004. These drawings are acceptable.

Allowable Subject Matter

5. Claims 5 - 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1 - 3, 12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,337,619 (Kowalski et al.) in view of U.S. Patent Application Publication No. U.S. 2002/0175705 A9 (Armstrong et al.).

Referring to Claims 1 - 3, 12, and 13, Kowalski's system comprises a terminal T or controller having a processor and a transceiver (see Col. 1, lines 17 - 14 and 27 - 32; and Col. 4, lines 7 - 16). Kowalski's method of selecting or binding an electronic module or device from a group of modules, wherein each module has its own address, comprises the following steps performed by terminal T: (a) sending a general query message ACTIVALL to the modules (see Col. 4, lines 7 - 16); (b) receiving or considering a first identification message ID3 or first address from a module M3 in the group and causing the remaining modules M1 and M2 to set themselves in an idle or deselection state (see Col. 4, lines 24 - 26 and 37 - 53); (c) sending a

selection message SELECT-ID3 to module 3 (see Col. 4, lines 30 - 34); (d) receiving a response R from module 3 (see Col. 8, lines 63 - 67); and (e) sending a HALT message to the selected or considered module in order to inhibit the module from responding to subsequent general query messages ACTIVALL (see Col. 8, lines 27 - 38). Here it is understood that the selected module marks itself as unavailable upon receiving the HALT message. Kowalski imparts that a module can be in seven states, including a selected state SEL, which is understood to indicate that the module is considered by terminal T, and an execution state EXEC, which is understood to indicate that the module is bound since it is to be controlled by terminal T (see Col. 8, lines 18 - 26). Kowalski teaches that steps (a) through (e) are then repeated in order for terminal T to select other modules that have yet to communicate with terminal T (see Col. 8, lines 31 - 36). Though Kowalski's method lacks the step of sending an interrogation signal or address inquiry signal to determine the presence of modules having a specific address, the common knowledge of controllers transmitting interrogation signals addressed to specific transponders is taken to be admitted prior art since the applicant failed to traverse the examiner's assertion of official notice in the previous Office Action (paper no. 7). Consequently, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kowalski's method such that terminal T or controller transmits an address inquiry signal addressed to a specific transponder 150 in order to determine the presence of modules having a specific address and to identify duplicate addresses prior to transmitting commands, thereby preventing the reception of a command by a plurality of modules having the same addresses. Kowalski's method further lacks the steps of (f) determining whether one or more additional responses to the address inquiry are received from one or more modules in the group and (g) instructing all devices having the same address to generate a random address.

In an analogous art, Armstrong's method includes (a) host computer 100 or controller transmitting a Read Tag_ID command to transponders 150 and determining from the received Tag_IDs if there is a transponder 150 that has the same Tag_ID or address as another transponder 150; and (b) host computer 100 transmitting a Re-select ID command or "Randomize Address" signal to a group of transponders 150 having the same Tag_ID, instructing transponders 150 to generate a random Tag_ID (see [0062], lines 11 - 26); and (c) host computer 100 retransmitting a Read Tag_ID command and receiving Tag_IDs from transponders 150. If duplicate Tag_IDs are detected again, Armstrong discloses that steps (b) and (c) until each transponder 150 has a unique Tag_ID (see [0047], lines 1 - 4 and [0062], lines 11 - 26).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Kowalski's method as taught by Armstrong because causing modules/device to generate random addresses upon detection of duplicate addresses greatly reduces interference and enables terminal T/controller to control and/or communicate with a particular module.

8. Claims 4 and 14 - 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,337,619 (Kowalski et al.) and Patent Application Publication No. U.S. 2002/0175705 A9 (Armstrong et al.) as applied to claims 1 - 3, 12, and 13 above, and further in view of U.S. Patent No. 6,133,832 (Winder et al.).

Regarding Claims 4 and 14, Kowalski and Armstrong's method lacks the step of instructing the first device (i.e., the selected or considered device) to provide a sensory output that identifies the first device to an operator.

In an analogous art, Winder's method for locating articles includes the steps of: (a) transmitter unit 16 or controller transmitting the access code or address of a tag 12 that is to be located; (b) a plurality of tags 12 receiving transmitter unit 16's signal, decoding the signal, and determining if the received access code is for that particular tag 12; and (c) tag 12 activating tag speaker drive circuit 108 if tag 12 determines that the received access code is its own, causing speaker 78 to emit a user recorded message or a predetermine alarm sound, and laser diode drive circuit 110, causing laser diode 86 and laser diode movement structure drive circuit 112 to generate a moving laser beam or visual output (see Fig. 5).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Kowalski and Armstrong's device and method as taught by Winder because the step of generating audio and visual outputs upon being selected/considered by a controller enables a user to confirm aurally and visually which device is communicating with the controller, thus making the system user-friendly.

Regarding Claims 15 and 16, Kowalski's method, as modified by Armstrong method also includes the steps of: (h) binding a module by transmitting a command COM after selecting or considering the module; (i) removing the module from further consideration when the module is in a SEL (considered but unbound) state or EXEC (considered and bound) state; and (j) repeating the method beginning at step (a) in Claim 12 (see Col. 8, lines 31 - 36).

9. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. U.S. 2002/0175705 A9 (Armstrong et al.) in view of U.S. Patent No. 5,838,226 (Houggy et al.).

Referring to Claim 9, Armstrong teaches a radio frequency (RF) transponder 150, as shown in Fig. 11, comprising a state machine 1155 or processor having a common default

Tag_ID (see [0062], lines 4 - 7) and a transceiver controlled by tag TX/RX control 1180 for transmitting and receiving signals (see [0054], lines 5 - 11; [0078], lines 1 - 9; and [0079], lines 1 - 3). Armstrong's state machine 1155 is programmed to (a) transmit its Tag_ID or address in response to receipt of a Read Tag_ID command or "Address Request" signal (see [0054], lines 5 - 11); (b) generate a random Tag_ID in response to receipt of a Re-select Tag_ID command or "Randomize Address" signal (see [0062], lines 11 - 14 and 19 - 26); (c) transmit the new random Tag_ID in response to receipt of a subsequent Read Tag_ID (see [0062] and 34 - 42); and (d) transmit the new Tag_ID upon receiving a Read Tag_Data command addressed to its new random Tag_ID (see [0064], lines 10 - 28). Because Armstrong's Read Tag_Data command causes a transponder 150 to transmit its Tag_ID along with data stored in its memory if the received Tag_ID is the same as transponder 150's Tag_ID, it is understood that the Read Tag_Data command also functions as an "Address Inquiry" signal. Armstrong, however, is silent on transponder 150's processor transmitting a response to host computer 100 after a predetermined time period upon receiving a Read Tag_ID command or address request signal.

In an analogous art, Houggy teaches an RF communication system for controlling electrical devices, such as lights, from remote locations (see Abstract). Houggy's system, as shown in Fig. 1, comprises lighting control device 50 (or device) that is bound to master control devices 20 and/or 30 (see Col. 12, lines 20 - 31 and 56 - 60). Fig. 2 is a view of lighting control device 50, which includes power and control board 506 or processor (see Col. 13, lines 46 - 51) that is programmed to transmit its status information in an assigned timeslot (i.e., "a pre-determined period of time") upon receiving a command from a master control device (see Fig. 18 and Col. 29, lines 29 - 40).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Armstrong's transponder 150 as taught by Houggy because having transponders 150 transmit their addresses in an assigned timeslot upon receiving a Read Tag_ID command avoids interference (see Houggy, Col. 3, lines 2 - 4).

Regarding Claim 10, Armstrong's host computer 100 is also able to cause transponder 150 to replace its Tag_ID with a separate and distinct Tag_ID by transmitting a Replace Tag_ID command (see [0063], lines 1 - 5). Per Armstrong, when host computer 100 detects that the Tag_ID of a particular transponder 150 is identical to an existing Tag_ID, host computer 100 transmits a Replace Tag_ID command, which includes the old Tag_ID for addressing the transponder and the new Tag_ID, to the particular transponder 150 (see [0063], lines 21 - 26). Upon receiving the command, transponder 150 stores the new Tag_ID in a temporary register, transmits the new Tag_ID back to host computer 100, and replaces its old Tag_ID with the new Tag_ID upon receipt of an acknowledge signal from host computer 100 (see [0063], lines 26 - 42).

10. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. U.S. 2002/0175705 A9 (Armstrong et al.) in view of U.S. Patent No. 5,838,226 (Houggy et al.) as applied to claim 10 above, and further in view of and U.S. Patent Application Publication No. U.S. 2002/0084890 A1 (Guerrieri et al.).

Though Armstrong, as modified by Houggy, teaches controlling lights via a lighting control device having an RF transponder, Armstrong and Houggy fail to teach a lamp comprising a transponder 150.

In an analogous art, Guerrieri teaches a system comprising a modular light devices or lamps and an interrogator or controller. Guerrieri's lighting apparatus includes microcontroller

20 (see Fig. 5) and a programmable communication means such as an RFID transponder or tag, thereby enabling an interrogator or reader to send and receive signals to and from transponder in order to identify and control the lighting apparatus. (See [0056].)

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Armstrong and Houggy's device as taught by Guerrieri because there is a need for wireless and programmable lamps that are able to provide varying amounts of light in accordance with programmed instructions and are adaptable for a plurality of purposes (see Abstract, [0012], and [0018]).

11. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,337,619 (Kowalski et al.) and Patent Application Publication No. U.S. 2002/0175705 A9 (Armstrong et al.) as applied to claim 12 above, and further in view of Patent Application Publication No. U.S. 2002/0084890 A1 (Guerrieri et al.)

Kowalski and Armstrong's device is an RFID transponder, not a lamp.

In an analogous art, Guerrieri teaches a system comprising a modular light devices or lamps and an interrogator or controller. Guerrieri's lighting apparatus includes microcontroller 20 (see Fig. 5) and a programmable communication means such as an RFID transponder or tag, thereby enabling an interrogator or reader to send and receive signals to and from transponder in order to identify and control the lighting apparatus. (See [0056].)

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Armstrong's device as taught by Guerrieri because there is a need for wireless and programmable lamps that are able to provide varying amounts of light in accordance with programmed instructions and are adaptable for a plurality of purposes (see Abstract, [0012], and [0018]).

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- U.S. Patent No. 5,798,693 (Engellenner): Engellenner teaches an RFID tag that receives a search request or includes means for comparing the transmitted search request with its own identification code. If a match is determined, the tag generates a responsive signal to indicate its presence.

- U.S. Patent No. 5,952,922 (Shober): Shober teaches an interrogator or controller transmitting an interrogation signal to a tag containing the address of a specific tag to which the interrogation request is directed.

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clara Yang whose telephone number is (703) 305-4086. The examiner can normally be reached on 8:30 AM - 7:00 PM, Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on (703) 305-4704. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CY
25 May 2004

BRIAN ZIMMERMAN
PRIMARY EXAMINER